

AC axial fan

sickle-shaped blades (S series)
with guard grille for short nozzle



S4E400-AR01-68 ebmpapst Datasheet
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Nominal data

Type	S4E400-AR01-68		
Motor	M4E074-GA		
Phase		1~	1~
Nominal voltage	VAC	230	230
Frequency	Hz	50	60
Method of obtaining data		ce	ce
Valid for approval/standard		CE	CE
Speed (rpm)	min ⁻¹	1390	1590
Power consumption	W	225	315
Current draw	A	1.05	1.38
Capacitor	μF	7	7
Capacitor voltage	VDB	400	400
Min. ambient temperature	°C	-30	-30
Max. ambient temperature	°C	70	70
Starting current	A	2.8	2.6

ml = Max. load · me = Max. efficiency · fa = Free air · cs = Customer specification · ce = Customer equipment
Subject to change

Data according to Commission Regulation (EU) 327/2011 (EN 17166)

		Actual	Req. 2015			
01 Overall efficiency η_{es}	%	30	29.7	09 Power consumption P_e	kW	0.23
02 Measurement category		A		09 Air flow q_v	m ³ /h	2700
03 Efficiency category		Static		09 Pressure increase p_{fs}	Pa	97
04 Efficiency grade N		40.3	40	10 Speed (rpm) n	min ⁻¹	1390
05 Variable speed drive		No		11 Specific ratio*		1.00

Data obtained at optimum efficiency level.
The ErP data is determined using a motor-impeller combination in a standardized measurement setup.

* Specific ratio = $1 + p_g / 100\,000\text{ Pa}$

LU-175142



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Technical description

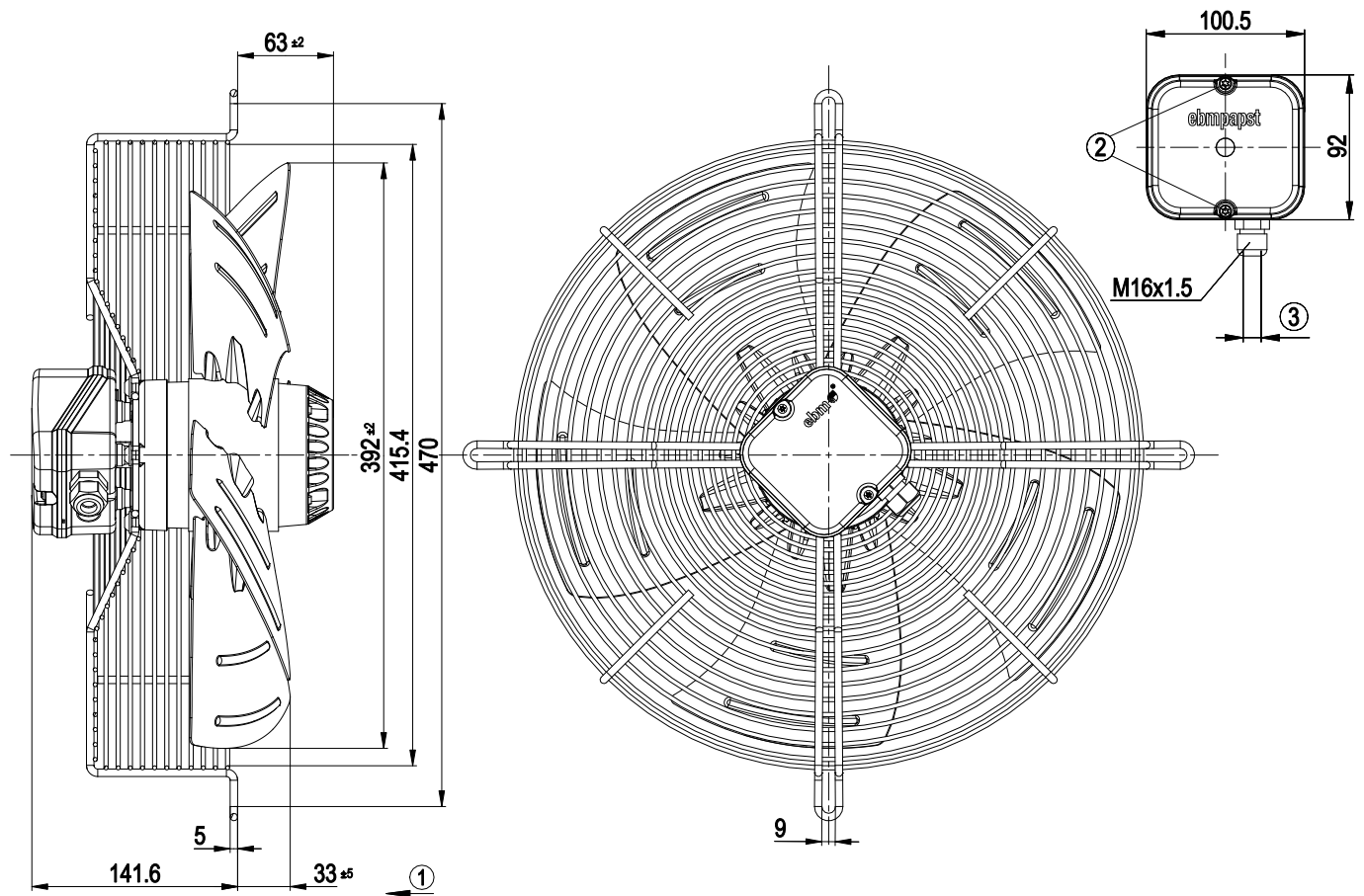
Weight	6.83 kg
Size	400 mm
Motor size	74
Rotor surface	Painted black
Terminal box material	PC/ABS plastic, black
Blade material	Sheet steel, painted black
Guard grille material	Steel, phosphated and coated with black plastic
Number of blades	5
Airflow direction	V
Direction of rotation	Counterclockwise, viewed toward rotor
Degree of protection	IP44; installation- and position-dependent as per EN 60034-5
Insulation class	"F"
Moisture (F) / Environmental (H) protection class	H1+
Max. permitted ambient temp. for motor (transport/storage)	+ 80 °C
Min. permitted ambient temp. for motor (transport/storage)	- 40 °C
Installation position	Shaft horizontal or rotor on bottom; rotor on top on request
Condensation drainage holes	On rotor side
Mode	S1
Motor bearing	Ball bearing
Touch current according to IEC 60990 (measuring circuit Fig. 4, TN system)	< 0.75 mA
Electrical hookup	Terminal box; Capacitor integrated and connected
Motor protection	Thermal overload protector (TOP) with basic insulation
With cable	Variable
Protection class	I (with customer connection of protective earth)
Motor capacitor according to EN 60252-1 in safety protection class	S0
Conformity with standards	EN 60335-1; CE
Approval	CSA C22.2 No. 100; EAC; UL 1004-1



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Product drawing

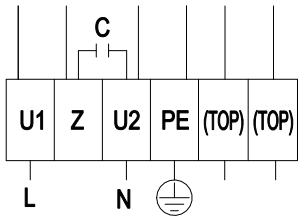


1	Direction of air flow "V"
2	Tightening torque 1.5 ± 0.2 Nm
3	Cable diameter min. 4 mm, max. 8 mm; tightening torque 1.3 ± 0.2 Nm

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Connection diagram



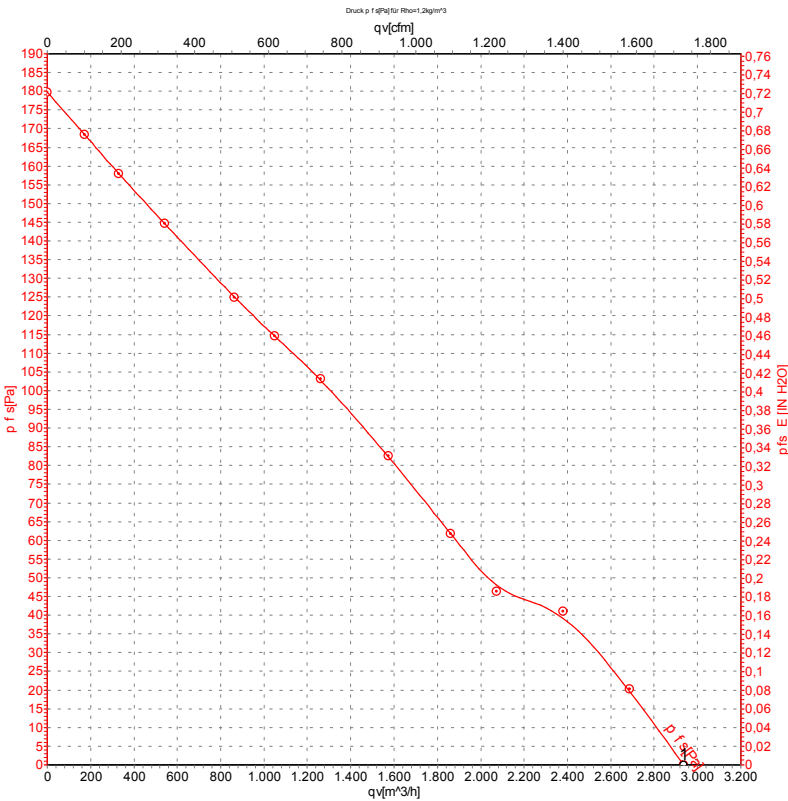
L	= U1 = blue	Z	brown	N	= U2 = black
PE	green/yellow	TOP	white		



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Curves: Air performance 50 Hz



Measurement: LU-40107-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

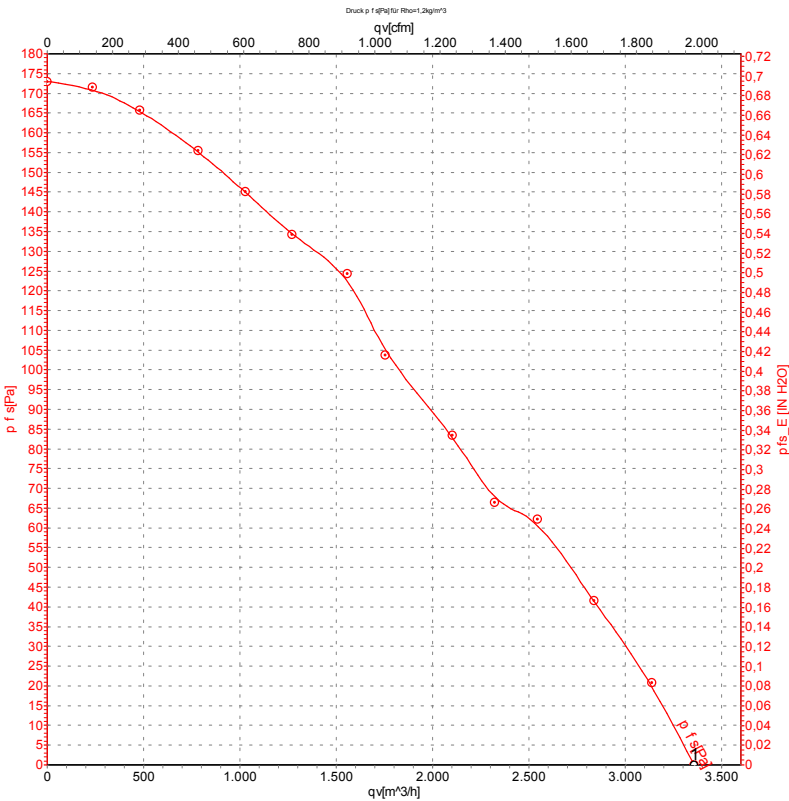
	U	f	n	P _e	I	q _V	q _V	p _{fs}
	V	Hz	min ⁻¹	W	A	m³/h	cfm	in. wg
1	230	50	1390	225	1.05	2935	1725	0.00

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow



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Curves: Air performance 60 Hz



Measurement: LU-40108-1

Air performance measured according to ISO 5801 installation category A. For detailed information on the measurement setup, contact ebm-papst. Intake sound level: Sound power level according to ISO 13347 / sound pressure level measured at 1 m distance from fan axis. The values given are valid under the specified measuring conditions and may vary due to conditions of installation. For deviations from the standard configuration, the parameters have to be checked on the installed unit.

Measured values

	U	f	n	P _e	I	q _V	q _V	p _{fs}
	V	Hz	min ⁻¹	W	A	m ³ /h	cfm	in. wg
1	230	60	1590	315	1.38	3355	1975	0.00

U = Voltage · f = Frequency · n = Speed (rpm) · P_e = Power consumption · I = Current draw · q_V = Air flow

